

BRAC Activities Affecting Aberdeen Proving Ground, Andrews Air Force Base, Bethesda Naval Hospital, and Fort Meade and in the State of Maryland

Draft Final Report

March 31, 2006

Prepared for:

Maryland Department of Business and Economic Development
Office of Military and Federal Affairs
217 East Redwood Street
Baltimore, MD 21202

Prepared by:

Science Applications International Corporation
4618 Holly Ridge Road
Rockville, MD 20853

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF EXHIBITS	ii
1.0 Introduction.....	1-1
1.1 Status of BRAC	1-1
1.2 Purpose of the Report.....	1-1
1.3 Data and Methods	1-2
1.4 Structure of the Report	1-2
2.0 Aberdeen Proving Ground	2-1
2.1 Jobs.....	2-2
2.1.1 Pay Grade and Income	2-4
2.1.2 Age of Workforce	2-6
2.1.3 Educational Requirements	2-6
2.1.4 Security Clearance Requirements	2-8
2.1.5 Marital Status and Dependents	2-8
2.1.6 Vacancies	2-8
2.2 Timeline for the Moves.....	2-9
2.3 Costs.....	2-10
3.0 Andrews Air Force Base	3-1
3.1 Jobs.....	3-1
3.1.1 Pay Grade and Income	3-3
3.1.2 Additional Demographic Information.....	3-4
3.2 Timeline for the Moves.....	3-5
3.3 Costs.....	3-5
4.0 Bethesda National Naval Medical Center	4-1
4.1 Jobs.....	4-1
4.1.1 Pay Grade and Income	4-2
4.1.2 Additional Demographic Information.....	4-2
4.2 Patient Load	4-2
4.3 Timeline for the Moves.....	4-3
4.4 Costs.....	4-3
5.0 Fort Meade	5-1
5.1 Jobs.....	5-1
5.1.1 Pay Grade and Income	5-3
5.1.2 Age of Workforce	5-6
5.1.3 Educational Requirements	5-6
5.1.4 Security Clearance Requirements	5-6
5.1.5 Marital Status and Dependents	5-6
5.1.6 Vacancies	5-7
5.2 Timeline for the Moves.....	5-7
5.3 Costs.....	5-8
6.0 Summary and Discussion.....	6-1
7.0 References	7-1
APPENDIX. Officials Contacted.....	A-1

LIST OF EXHIBITS

Exhibit 1. BRAC-related Job Transfers and Potential Mission Contractor Moves Affecting APG.....	2-2
Exhibit 2. Base Operations Support Position Changes Related to Job Transfers Affecting APG.....	2-3
Exhibit 3. Pay Grade for DOD Civilian Personnel Whose Positions are Moving from Fort Monmouth to APG.....	2-4
Exhibit 4. Grade and Pay for Military Personnel Moving to APG.....	2-4
Exhibit 5. Summary of Positions and Annual Total Pay for Position Changes at APG.....	2-5
Exhibit 6. Education Level for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG.....	2-6
Exhibit 7. Occupational Category for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG.....	2-7
Exhibit 8. Job Series Categories for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG.....	2-7
Exhibit 9. Timeline for Organization Moves Affecting APG.....	2-9
Exhibit 10. Estimated Construction Costs to Accommodate Incoming BRAC Missions at APG.....	2-11
Exhibit 11. BRAC-Related Job Transfers Affecting Andrews AFB.....	3-1
Exhibit 12. Base Operations Support Position Changes Related to Job Transfers Affecting Andrews AFB	3-2
Exhibit 13. Net Position Changes at Andrews AFB	3-3
Exhibit 14. Estimated Pay Associated with Job Transfers Affecting Andrews AFB.....	3-4
Exhibit 15. Timeline for Position Movements Affecting Andrews AFB.....	3-5
Exhibit 16. Estimated BRAC Military Construction Expenditures at Andrews AFB.....	3-6
Exhibit 17. Current Patient Load at NNMC Bethesda.....	4-2
Exhibit 18. Estimated Military Construction Expenses at NNMC Bethesda	4-3
Exhibit 19. BRAC-Related Position Increases and Potential Mission Contractor Moves Affecting Fort Meade	5-1
Exhibit 20. BRAC-Related Position Increases Associated with Adjudication Activities Collocating At Fort Meade	5-2
Exhibit 21. BRAC-Related Position Increases Associated with Media Activities Consolidating At Fort Meade	5-3
Exhibit 22. BRAC-Related Position Increases Associated with DISA Consolidating At Fort Meade.....	5-3
Exhibit 23. Grade and Pay for DOD Media Position Increases at Fort Meade	5-4
Exhibit 24. Grade and Pay for DISA Civilian Position Increases at Fort Meade	5-5
Exhibit 25. Estimated Average and Total Pay for All Position Increases at Fort Meade	5-5
Exhibit 26. Organization Moves Into Fort Meade Over Time.....	5-8
Exhibit 27. Estimated Costs and Schedule for Activities Relocating to Fort Meade	5-8
Exhibit 28. Summary of Net Position Changes Due to BRAC 2005.....	6-1
Exhibit 29. Summary of Information on Movement of Civilian Personnel and Embedded Contractors.....	6-1
Exhibit 30. Summary of Information on Personnel, Spouses, and Dependents	6-2
Exhibit 31. Summary of Information on Potential Payroll	6-3

Exhibit 32. Summary of Information on Military Construction Expenditures	6-4
--	-----

ACRONYMS AND ABBREVIATIONS

AF	Air Force
AFB	Air Force Base
AFFSA	Air Force Flight Standards Agency
AFIS	American Forces Information Service
AFOSI	Air Force Office of Special Investigation
AGS	Air Guard Station
AMC	Army Medical Center
ANG	Air National Guard
APG	Aberdeen Proving Ground
ATEC	Army Test and Evaluation Command
BAH	Basic Allowance for Housing
BAS	Basic Allowance for Subsistence
BRAC	Base Realignment and Closure
CAF	Central Adjudication Facility
CCF	(Army) Central Clearance Facility
CE-LCMC	Communications-Electronics Life Cycle Management Command
CECOM	Communications Electronics Command
CERDEC	Communications-Electronics Research Development and Engineering Center
COBRA	Cost of Base Realignment Actions
CSLA	Communications Electronics Command Communications Security Logistics Activity
D&A	Development and Acquisition
DBED	Maryland Department of Business and Economic Development
DISA	Defense Information Systems Agency
DJC2	Deployable Joint Command and Control
DOD	Department of Defense
DOHA	Defense Office of Hearings and Appeals
E	Enlisted
FY	Fiscal Year
GS	General Schedule
ISDA	Information Systems Development and Acquisition
JNMS	Joint Network Management System
JSC	Joint Spectrum Center
JTRS	Joint Tactical Radio System
NSA	National Security Agency
NNMC	National Naval Medical Center
O	Officer
R&D	Research and Development
R&D&A	Research, Development and Acquisition
SES	Senior Executive Service
WO	Warrant Officer

1.0 INTRODUCTION

This report responds to the Maryland Department of Business and Economic Development's (DBED) request for data on base realignment and closure (BRAC) activities, funded by a grant from the U.S. Department of Labor and agreement with Maryland's Department of Labor, Licensing and Regulation. The request focuses on 4 military installations: Aberdeen Proving Ground (APG), Andrews Air Force Base (AFB), Fort Meade, and the Bethesda National Naval Medical Center (NNMC). These facilities and the surrounding areas could grow by as many as 50,000 additional persons over the next 6 years as a result of jobs that the Department of Defense (DOD) is transferring to the State of Maryland in accordance with recent BRAC recommendations approved by the U.S. Congress. This total includes military and civilian personnel as well as an extensive contractor component and dependents.

1.1 STATUS OF BRAC

The BRAC recommendations took effect on November 9, 2005, and involve more than 800 installations. Maryland is one of very few states slated to experience a significant net gain, primarily at the four installations mentioned above. The DOD has until September 15, 2007 to begin the indicated closings, which must be completed by September 15, 2011. Beginning in October 2005, the affected installations had to submit implementation plans, including Manpower Action Plans, so that the DOD could produce a master implementation plan and 241 local implementation plans. These plans were initially based on an analytical tool, the Cost of Base Realignment Actions (COBRA), used to calculate the costs and savings associated with the proposed BRAC actions.

The resulting figures provided an initial basis for military funding requirements associated with BRAC. However, due to the large number of positions expected to move to installations in Maryland, the potentially large associated contractor trail, and the potential for restationing requests not related to BRAC that could also affect employment totals, more detailed information is necessary in order for State and local agencies to plan the needs of incoming personnel and their families, as well as current residents of nearby communities, can be accommodated.

1.2 PURPOSE OF THE REPORT

This report provides detailed information about the number and nature of position changes for each of the four installations, to the extent available. The report also provides estimates of the costs to construct or renovate military installations to provide the necessary infrastructure for the incoming missions. The goal is to aid State agencies as well as county and local planning organizations to develop plans to take advantage of the opportunities provided by this remarkable employment gain, to accommodate employees new to Maryland and the communities where they will live and work, and to advocate for additional State or Federal funding where it is needed to support their goals. The report should also assist targeted marketing efforts aimed at encouraging civilians whose jobs are transferring to Maryland to relocate.

The information in this report will support and mesh with other efforts for DBED which will provide information concerning infrastructure needs in the communities near the affected bases,

short- and long-term needs for educational programs to meet job training requirements, and recruitment needs to support the missions of the gaining bases.

1.3 DATA AND METHODS

Using the framework of the Maryland Military Installations Strategic Planning Council and its membership (which includes the Alliances, installation personnel, state agencies and local governments), we made contact with the commanding officer and/or the BRAC transition officer at each of the gaining installations to collect information about each BRAC-related relocating function or unit. Working from these initial contacts, we also contacted persons in charge of individual functions or units relocating to the bases in Maryland, including personnel at the losing installations. The Appendix includes a full list of the officials who contributed information and comments.

We attempted to collect information not only on construction costs and number of positions moving, but also demographic data on the personnel who currently hold these jobs, including age, dependents, and pay grade; educational and security clearance requirements for the positions; and the likelihood that the personnel who currently hold these jobs would move with the positions. For some installations or missions, personnel at the gaining and losing installations were unable to provide information about one or more of our data requests other than that in publicly available documents such as the BRAC Commission Report (BRAC Commission, 2005) and DOD's justification reports for its BRAC recommendations, which include summary reports from the COBRA analytical tool ("COBRA reports"). In these cases, we summarize available information from public sources for a preliminary indication of the potential impacts. Note, however, that the COBRA reports seem to provide estimates of position movement and costs that are low compared to more current estimates provided by personnel at the gaining and losing installations.¹ In addition, publicly available sources generally do not have detailed information about age, number of dependents, pay grade, or educational or security requirements.

The figures provided in this report are the best available at this time, but should be considered preliminary. DOD's own projections of construction costs, position movement, and related adjustments in authorized positions will likely continue to change as political and economic events alter the environment in which BRAC mandated moves will occur. As DOD finalizes its national and regional implementation plans, more information will likely become available.

1.4 STRUCTURE OF THE REPORT

This report is organized as follows. Sections 2 through 5 provide estimates for each of the installations. Section 6 provides a summary, and Section 7 provides references.

¹ For example, COBRA reports for recommendations that affect positions at APG, along with the BRAC Commission report that provides information on embedded contractor positions, indicate a net gain of 5,851 positions moving into APG, but current estimates from personnel on the ground (Wright, 2006; Hall, 2006) indicate a net gain of closer to 9,000 positions. Similarly, COBRA reports relating to APG indicate total military construction costs of \$463 million, but current estimates from APG (Wright, 2006) indicate military construction costs of \$1.1 billion.

2.0 ABERDEEN PROVING GROUND

Aberdeen Proving Ground (APG), an Army base located in Harford County, MD, is a center for Army materiel testing, laboratory research, and military training. Current (pre-BRAC) missions include testing materiel, training Army ordnance personnel, and chemical warfare research and development (DOD, 2005a). In addition to the approximately 5,000 military personnel assigned to APG, more than 7,500 civilians and about 3,000 contractors currently work at this installation (DOD, 2005a).

As part of BRAC 2005, the DOD is transferring jobs from installations in Fort Monmouth, NJ, and other locations to APG. These include positions associated with:

- Human Systems Research of the Army Research Institute at Fort Knox, KY
- Vehicle Technology Directorates from the Army Research Laboratories at Langley, VA, and Glenn, OH
- components of the Army Test and Evaluation Command (ATEC) currently located at Park Center Four, a leased installation in Alexandria, VA
- Non-Medical Chemical Biological Defense Development and Acquisition (D&A), currently located at Brooks City Base, San Antonio, TX
- the Chemical Biological Defense Research component of the Defense Threat Reduction Agency, currently located at Fort Belvoir, VA
- the Joint Program Executive Office for Chemical Biological Defense, currently located in Falls Church, VA
- Medical Chemical Defense Research from the Walter Reed Army Institute of Research (Forest Glen Annex, Silver Spring, MD), to be consolidated with the U.S. Army Medical Research Institute of Chemical Defense
- Communications-Electronics Life Cycle Management Command (CE-LCMC), Communications-Electronics Research, Development, and Engineering Center (CERDEC), and related missions currently located at Fort Monmouth, NJ and Fort Belvoir, VA
- Information Systems Development and Acquisition (ISDA), currently located at Redstone Arsenal, AL
- Communications-Electronics Command (CECOM) Communications Security Logistics Activity or CSLA (integrated materiel management, user, and related support functions), currently located in Fort Huachuca, AZ (BRAC Commission, 2005).

In addition, the DOD is transferring positions from APG to other installations:

- the Ordnance Center and School, moving to Fort Lee, VA, where other missions will consolidate to form a Combat Service Support Center
- the Army Environmental Center, moving to Fort Sam Houston, TX (BRAC Commission, 2005).

2.1 JOBS

Exhibit 1 provides a summary of position movement affecting APG. As the exhibit shows, APG will gain an estimated 9,448 positions. There are also 2,817 students leaving the installation.

Exhibit 1. BRAC-related Job Transfers and Potential Mission Contractor Moves Affecting APG

Organization and Current Location	Military	Civilian	Embedded Contractors¹	Total
Movement Into APG				
Army Research Institute (Fort Knox, KY)	0	11	22	33
Vehicle Technology Directorates at Langley, VA and Glenn, OH	3	90	0	93
ATEC (Alexandria, VA)	170	625	139	934
Chemical and Biological R&D&A (Brooks, TX, and Falls Church and Fort Belvoir, VA)	36	175	142	353
Medical Chemical Defense Research (Walter Reed, Forest Glen Annex, Silver Spring, MD)	0	57	0	57
CE-LCMC (Fort Monmouth, NJ); CECOM activities at Fort Belvoir, VA; ISDA (Redstone Arsenal, AL); CSLA (Fort Huachuca, AZ) ²	155	4,818	2,043	7,016
CERDEC (Fort Monmouth, NJ)	21	1,603	316	1,940
Total	385	7,379	2,662	10,426
Movement Out of APG				
Total³	-613	-365	nd	-978
Net Movement Into APG				
Total³	-228	7,014	2,662	9,448

Source: Wright, 2006 (moves into APG); Hall, 2006 (moves out of APG)

APG = Aberdeen Proving Ground

ATEC = Army Test and Evaluation Command

R&D&A = Research, Development and Acquisition

CE-LCMC = Communications-Electronics Life Cycle Management Command

CECOM = Communications Electronics Command

CERDEC = Communications-Electronics Research Development and Engineering Center

ISDA = Information Systems Development and Acquisition

CSLA = Communications Electronics Command Communications Security Logistics Activity

nd = no data.

1. Embedded contractors are those who operate out of government-supplied on-base space. Does not include additional (nonembedded) contractor trail. Patriots Alliance (2005) indicates there are 4,000 contractors associated with the positions currently at Fort Monmouth (some of which are moving to bases other than APG); however, it is unclear whether these represent embedded or nonembedded contractors.

2. The majority of these civilian positions – about 3,000 to 4,000 based on Wright (2006) and Nappi (2006) – are moving from Fort Monmouth. The data shown may include authorized plus-ups (i.e., additional new positions authorized) as well as position movement (Nappi, 2006). Nappi (2006) also provides alternate position totals (including ISDA, CSLA, and CERDEC) of 140 military, 5,183 civilians, and 1,852 contractors, for 7,175 total positions.

3. Does not include 2,817 students leaving APG (Hall, 2006). Base officials (Hall, 2006) state that the

Exhibit 1. BRAC-related Job Transfers and Potential Mission Contractor Moves Affecting APG

Organization and Current Location	Military	Civilian	Embedded Contractors ¹	Total
-----------------------------------	----------	----------	-----------------------------------	-------

students do not have an impact outside the base. COBRA data suggests most of the military positions moving out of APG are associated with the Ordnance Center and School and most of the civilian positions are associated with the Army Environmental Center (DOD, 2005b, 2005c).

The movement of positions at APG will result in a change in base operations support positions, such as maintenance, cleaning, and other support staff. Although APG has not provided information on changes in these support positions, according to COBRA reports, APG will experience a net loss of 294 civilian and military positions related to base operations support (DOD, 2005b, 2005c, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j). **Exhibit 2** provides a summary of these changes. Since the COBRA reports reflect outdated estimates of personnel movement, the actual change in base operations support positions may be different than that indicated by the COBRA reports.

Exhibit 2. Base Operations Support Position Changes Related to Job Transfers Affecting APG

Organization	Officers	Enlisted	Civilians	Total
Vehicle Technology Directorates	0	0	9	9
ATEC	0	0	11	11
Chemical & Biological R&D&A	0	0	10	10
Medical Chemical Defense Research	0	0	1	1
CE-LCMC, CERDEC, ISDA, and Army Research Institute	0	0	168	168
CSLA	0	0	52	52
Ordnance Center and School	-34	-283	-228	-545
Total	-34	-283	23	-294

Source: DOD, 2005b, 2005c, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j.

Note: Organizations not shown have no base operations support position changes according to COBRA reports. Negative numbers indicate net loss of positions.

APG = Aberdeen Proving Ground

ATEC = Army Test and Evaluation Command

R&D&A = Research, Development, and Acquisition

CE-LCMC = Communications-Electronics Life Cycle Management Command

CERDEC = Communications-Electronics Research Development and Engineering Center

ISDA = Information Systems Development and Acquisition

CSLA = Communications Electronics Command Communications Security Logistics Activity

The net changes in base operations support personnel in Exhibit 2 appear to be driven by the temporary duty assignments of the approximately 2,800 students leaving APG with the Ordnance Center and School.

2.1.1 Pay Grade and Income

Nappi (2006) provided information on pay grade for 3,939 civilian personnel in the current workforce whose functions are moving from Fort Monmouth to APG (**Exhibit 3**). According to Nappi (2006), the salary for these personnel ranges from \$20,108 to \$158,095, with an average salary of \$86,715. The exhibit also shows average pay for individual categories based on the Federal civil service pay system (OPM, 2005a, 2005b, 2006).

Exhibit 3. Pay Grade for DOD Civilian Personnel Whose Positions are Moving from Fort Monmouth to APG

Pay Grade Category	Average Pay for Grade ¹	Number of Personnel
GS 1-6	\$28,854	205
GS 5-11 ²	\$46,695	200
GS 7-11	\$51,183	622
GS 12-13 ²	\$80,692	2,197
GS 14-15 ²	\$112,725	705
SES ³	\$151,856	10
Total	\$86,715	3,939

Source: Nappi, 2006 (number of personnel and overall average pay); OPM, 2005a, 2005b, 2006 (average pay for individual categories).

DOD = Department of Defense

APG = Aberdeen Proving Ground

GS = General Schedule

SES = Senior Executive Service

1. GS 1-15 pay is from OPM (2006), for the Washington, DC metropolitan area, for Step 5, averaged over the grades in each category. SES pay is average for 2004 from OPM (2005a), adjusted to 2006 dollars using GS rate increases for the Washington, DC metropolitan area (OPM, 2005b, 2006).

Average pay shown for all employees is from Nappi (2006).

2. GS 5-11 includes personnel in broadband pay categories DB/DE/DK 2 and NH/NK 2, GS 12-13 includes personnel in DB/DE/DK 3 and NH/NK 3, and GS 14-15 includes personnel in DB/DE 4 and NH 4, based on correspondence of categories DB (engineer/scientist) and NH (business and technical management professional) to GS levels (OPM, 1999, 1997).

3. Includes one employee in category ST (comparable to SES for scientists and engineers).

Hall (2006) provided information on pay grade for 131 of the 385 military personnel moving to APG. For the remaining 254 personnel, most of whom are currently located at Fort Monmouth (Hall, 2006), the number of officers and enlisted personnel can be estimated based on the proportion of officers and enlisted personnel from COBRA report for the recommendation to close Fort Monmouth (DOD, 2005e). **Exhibit 4** provides a summary of available information on pay grade and estimated annual pay for military personnel moving to APG.

Exhibit 4. Grade and Pay for Military Personnel Moving to APG

Grade	Number ¹	Basic Pay ²	BAH ²	BAS ²	Cash Pay ²
Enlisted (E1-E9)	115	\$26,125	\$12,286	\$3,267	\$41,678
WO 1-3	11	\$46,789	\$15,814	\$2,250	\$64,853
Officer, O1-O3	22	\$49,054	\$15,588	\$2,250	\$66,892
Officer, O4-O6	60	\$79,034	\$22,097	\$2,250	\$103,380

Exhibit 4. Grade and Pay for Military Personnel Moving to APG

Grade	Number ¹	Basic Pay ²	BAH ²	BAS ²	Cash Pay ²
Commissioned Officer, unspecified rank	165	\$61,544	\$18,280	\$2,250	\$82,074
WO, unspecified rank	12	\$50,394	\$16,159	\$2,250	\$68,803
Total	373	\$19,495,028	\$6,271,767	\$956,219	\$26,722,955

WO = Warrant Officer

BAH = Basic Allowance for Housing

BAS = Basic Allowance for Subsistence

1. From Hall, 2006 (93 officers and 38 enlisted personnel); remainder estimated based on Nappi, 2006, which indicates that 65% of military personnel moving from Fort Monmouth are commissioned officers, 5% are warrant officers, and 30% are enlisted.
2. Average actual pay in 2006 for members currently serving (DOD, 2006), using a weighted average over the grades in each category. Cash pay is sum of basic pay and allowances for subsistence and housing. All figures are annual.

Exhibit 5 summarizes available information on positions and total pay associated with the BRAC activities affecting APG. The exhibit does not include pay for nonembedded contractors.

Exhibit 5. Summary of Positions and Annual Total Pay for Position Changes at APG

Position Type	Change in Positions	Estimated Change in Total Pay (\$ millions)
Direct Position Movement Into APG		
Military ¹	385	\$27
Civilian ²	7,379	\$640
Embedded Contractors ²	2,662	\$231
Direct Position Movement Out of APG		
Military ³	-613	-\$28
Civilian ²	-365	-\$32
Net Base Operations Support Position Changes at APG		
Military ⁴	-317	-\$15
Civilian ⁵	23	\$1
Total	9,154	\$824

APG = Aberdeen Proving Ground

Note: Does not include 2,817 students leaving APG (Hall, 2006).

1. Basis for total pay estimate is summarized in Exhibit 4.
2. Total pay is estimated based on average pay for DOD civilian personnel moving from Fort Monmouth to APG (Nappi, 2006).
3. Total pay is estimated based on officer/enlisted breakout from COBRA reports, total number of military leaving from Exhibit 1, and average actual pay in 2006 for officers (\$81,162) and enlisted persons (\$41,678) (DOD, 2006). The COBRA reports indicate that 11% of the military personnel leaving the base are officers (DOD, 2005b, 2005c); this implies the 613 military leaving comprise 67 officers and 546 enlisted personnel.
4. Total pay is estimated based on officer/enlisted breakout from COBRA reports as shown in Exhibit 2 and average actual pay in 2006 for officers (\$81,162) and enlisted persons (\$41,678) (DOD, 2006).
5. Total pay is estimated based on number of positions (shown in Exhibit 2) and COBRA standard factors, which suggest an average cost of \$59,959 for civilian personnel (e.g., DOD, 2005b). The lower pay estimate was used instead of the estimate from Nappi (2006) because civilian base operations support

Exhibit 5. Summary of Positions and Annual Total Pay for Position Changes at APG

Position Type	Change in Positions	Estimated Change in Total Pay (\$ millions)
---------------	---------------------	---

positions are likely to be less technical and therefore lower paying positions.

2.1.2 Age of Workforce

While APG did not provide information on the age of the current workforce for organizations moving into the base, Nappi (2006) indicates the age distribution of 3,939 civilian DOD employees at Fort Monmouth whose functions are transferring to APG. Note that there may be additional new civilian positions authorized as part of the BRAC process and related to the mission coming in from Fort Monmouth (Nappi, 2006).

- 544 (14%) are under 30 years old
- 358 (9%) are between 30 and 39 years old
- 1,298 (33%) are between 40 and 49 years old
- 1,324 (34%) are between 50 and 59 years old
- 415 (11%) are over 60 years old.

Nappi (2006) also indicates that the average age of these 3,939 personnel is about 46.5.

2.1.3 Educational Requirements

Exhibit 6 provides a summary of information on educational levels of 3,939 DOD civilian personnel in the current workforce whose functions are moving from Fort Monmouth to APG (Nappi, 2006).

Exhibit 6. Education Level for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG

Education Level	Number of Personnel	Percent of Personnel
High School	1,208	31%
Associate Degree	275	7%
Bachelor's Degree	1,869	47%
Master's Degree	547	14%
Doctorate	40	1%
Total	3,939	100%

APG = Aberdeen Proving Ground

DOD = Department of Defense

Source: Nappi, 2006.

In addition, Patriots Alliance (2005) reports that based on a survey of 1,221 contractor employees at 7 companies working at Fort Monmouth, 72% of the contractor employees have at least a 4-year college degree.

Nappi (2006) also provided information on the occupational categories of DOD civilians in the current workforce whose functions are moving from Fort Monmouth. This information is summarized in **Exhibit 7**.

Exhibit 7. Occupational Category for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG

Occupational Category	Number of Personnel	Percent of Personnel
Engineering and Science	1,463	37%
Logistics, Support, and Maintenance	871	22%
Administration and Business	792	20%
Contracting	302	8%
Clerk / Assistant	293	7%
Information Technology	141	4%
Other	77	2%
Total	3,939	100%

APG = Aberdeen Proving Ground

DOD = Department of Defense

Source: Nappi, 2006.

The information on general occupational categories is supplemented by information on job series categories for current civilian employees whose positions are moving from Fort Monmouth (Craten, 2006). **Exhibit 8** presents the job series categories for which there are more than 25 employees indicated.

Exhibit 8. Job Series Categories for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG

Occupational Category¹	Number of Personnel	Percent of Personnel²
Electronics Engineering Series	835	21%
Logistics Management Series	476	12%
Computer Engineering Series	343	9%
Contracting Series	306	8%
Management and Program Analysis Series	268	7%
Miscellaneous Administration and Program Series	228	6%
Computer Science Series	187	5%
Secretary Series	152	4%
Inventory Management Series	109	3%
General Supply Series	94	2%
Supply Program Management Series	86	2%
Budget Analysis Series	77	2%
Management and Program Clerical and Assistance Series	55	1%
Technical Writing and Editing Series	46	1%
Telecommunications Series	45	1%
General Engineering Series	38	1%
Information Technology Management Series	38	1%
Operations Research Series	35	1%
Security Administration Series	34	1%
Equipment Specialist Series	29	1%
General Attorney Series	28	1%
Financial Administration and Program Series	27	1%

Exhibit 8. Job Series Categories for DOD Civilians Whose Positions are Moving from Fort Monmouth to APG

Occupational Category¹	Number of Personnel	Percent of Personnel²
Accounting Series	27	1%

APG = Aberdeen Proving Ground

DOD = Department of Defense

Source: Craten, 2006.

1. Categories with 25 or more personnel are shown.

2. Percent of the 3,935 personnel for whom categories are provided.

Nappi (2006) states that Fort Monmouth offers their workforce graduate programs in Systems Engineering, Software Engineering, Electrical Engineering, and Management with various concentrations such as contracting and logistics. Fort Monmouth partners with universities including Monmouth University, Florida Institute of Technology, and Stevens Institute of Technology for education programs. Fort Monmouth also funds a wide variety of undergraduate courses, including courses taught at Fort Monmouth by Brookdale Community College (Nappi, 2006). There is a great deal of interest among the current employees in whether similar educational opportunities would be available when the missions move to APG (Nappi, 2006; Fuhring, 2006).

2.1.4 Security Clearance Requirements

According to Nappi (2006) and Fuhring (2006), the majority of positions moving from Fort Monmouth would require at least a Secret clearance. This information is supported by Patriots Alliance (2005), which indicates that 98% of 4,535 civilian employees currently at Fort Monmouth have a security clearance at some level (Confidential, Secret, Top Secret, or Sensitive Compartmentalized Information). Patriots Alliance (2005) also states that based on a survey of 1,221 contractor employees at 7 companies working at Fort Monmouth, 93% of contractor employees have at least a Confidential security clearance.

2.1.5 Marital Status and Dependents

Due to privacy concerns, neither APG nor the losing installations could provide information on marital status or the number of dependents for personnel whose functions are transferring to APG. Based on an average household size of 2.7 persons for Monmouth County, NJ (U.S. Census Bureau, 2005), the net gain of 9,154 positions (Exhibit 5) implies about 15,562 additional household members, for a total inflow of 24,716 people. Estimates are not available on how many family members will move with the positions gained.

2.1.6 Vacancies

Nappi (2006) states that the latest surveys of Fort Monmouth employees whose functions are moving to APG suggest about 30% of the civilian employees from Fort Monmouth will transfer to APG. This figure is generally consistent with an April 2005 survey of DOD civilian employees at Fort Monmouth, NJ, which suggested that about 20% of technical civilian

employees would relocate to APG and the other bases to which Fort Monmouth's positions are being relocated (Patriots Alliance, 2005).

Fort Monmouth currently has a program involving "overhiring," which is the practice of providing on-the-job training to personnel who may eventually replace potential retirees, so that when the job is transferred, a fully trained replacement is ready to go. Overhires are recruited from Maryland so that trained replacement workers will be available when the missions transfer to APG (Nappi, 2006; Fuhring, 2006). The use of overhires is consistent with the recommendations of the BRAC Commission as they relate to the transfer of positions from Fort Monmouth to APG and other installations, as the Commission concluded that the potential adverse effects of moving existing programs could be managed over the BRAC implementation period by properly sequencing the movement of programs to ensure no loss in service, or by providing temporary redundant or duplicative capabilities as necessary to ensure continuous and uninterrupted program integrity (BRAC Commission, 2005).

In addition, many of the transferring personnel may initially want to commute between their current residence and the new workplace at APG (Nappi, 2006; Fuhring, 2006). This suggests a need for public transportation between the APG and Monmouth areas, and rental apartments near APG, to accommodate weekly commuters.

Aside from the information provided by Fort Monmouth, none of the other losing installations, nor APG, provided information on how many DOD civilian employees or contractors who currently hold positions at losing installations are likely to relocate to APG.

2.2 TIMELINE FOR THE MOVES

The timeline for the movement of positions depends on the timing of the construction of facilities to house the incoming missions, and military construction estimates are constantly changing. However, Whitaker (2006) indicates that in its allocation of military construction funds, the Army intends to prioritize expenditures that would support the movement of troop organizations before expenditures that would support movement of nontroop organizations. Thus, movements of nonuniformed Army organizations may occur in the latter half of the BRAC implementation period (i.e., 2009 to 2011).

While COBRA data suggest that the bulk of the moves will happen in 2008 and 2009, with all movement completed by 2009 (**Exhibit 9**), the movement of civilian DOD employees may more likely occur between 2009 and 2011 given the need for funding and the priorities of the Army. Note that the total position movement from the COBRA reports differs substantially from information provided by more current sources (e.g., as shown in Exhibit 1).

Exhibit 9. Timeline for Organization Moves Affecting APG¹

Organization and Location	2006	2007	2008	2009	Total
Movement Into APG					
Vehicle Technology Directorates (Langley, VA and Glenn, OH) ²	0	0	63	9	72
ATEC (Alexandria, VA)	351	2	9	0	362
Nonmedical Chemical/Biological Defense D&A	0	0	61	0	61

Exhibit 9. Timeline for Organization Moves Affecting APG¹

Organization and Location	2006	2007	2008	2009	Total
(Brooks City Base, San Antonio, TX)					
Joint Centers of Excellence for Chemical, Biological, and Medical R&D&A (Falls Church and Fort Belvoir, VA) ²	0	0	98	0	98
Medical Chemical Defense Research (Walter Reed, Forest Glen Annex, Silver Spring, MD)	0	0	25	0	25
CE-LCMC and CERDEC (Fort Monmouth, NJ) ³ ISDA (Redstone Arsenal, AL) Army Research Institute (Fort Knox, KY) CECOM activities at Fort Belvoir, VA	0	168	88	4,784	5,040
CSLA (Fort Huachuca, AZ)	0	0	228	0	228
Movement Out of APG					
Ordnance Center and School ⁴	0	-15	-732	-635	-1,382
Army Environmental Center	0	-36	-144	0	-180
Net Movement Into APG					
Total^{3,4}	351	119	-304	4,158	4,324

Source: DOD, 2005b, 2005c, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j.

APG = Aberdeen Proving Ground

ATEC = Army Test and Evaluation Command

D&A = Development and Acquisition

R&D&A = Research, Development and Acquisition

CE-LCMC = Communications-Electronics Life Cycle Management Command

CERDEC = Communications-Electronics Research Development and Engineering Center

ISDA = Information Systems Development and Acquisition

CSLA = Communications Electronic's Command Communications Security Logistics Activity

1. Includes base operations support positions. Note that while the position data in this table are not consistent with more current estimates (e.g., as shown in Exhibit 5), the data in this table are the most up-to-date estimates that have detailed information about the timeline for position changes.

2. The estimate of base operations support position changes is based on DOD's initial recommendation, which included the movement of more positions than the final recommendation of the BRAC Commission.

3. Does not include 1 student position coming into APG in 2009 (DOD, 2005e).

4. Does not include 2,817 student positions leaving APG (Hall, 2006); according to the COBRA report for this recommendation, student positions are scheduled to transfer primarily in 2008 and 2009 (DOD, 2005b).

2.3 COSTS

Exhibit 10 provides a summary of information on construction costs to accommodate the missions coming to APG as a result of BRAC.²

² Note that DOD is currently in the midst of a significant effort to develop improved estimates of construction costs required for BRAC actions, and results are not expected for several months. Appreciating the deep need of local and state officials for construction information, Wright (2006) graciously supplied current construction cost information, but indicates the cost estimate may change as DOD continues to develop its implementation plans.

Exhibit 10. Estimated Construction Costs to Accommodate Incoming BRAC Missions at APG

Organization or Description	Estimated Cost (\$ millions)
Army Research Institute	\$4.25
Vehicle Technology Directorates	\$72
ATEC	\$57
Chemical and Biological R&D&A	\$26
Medical Chemical Defense Research ¹	\$39
CE-LCMC, CECOM activities at Fort Belvoir, ISDA, and CSLA	\$389
CERDEC (Fort Monmouth, NJ)	\$308
Accommodate CERDEC Flight Activities	\$150
Accommodate CERDEC Range Activities	\$17.5
Barracks Alteration at APG ²	\$28
Information Management Upgrade at APG	\$42
Infrastructure Upgrade at APG	\$47
New Child Development Center at APG	\$9
Total	\$1,189

Source: Wright, 2006.

Note: Costs are based on new construction except as noted.

APG = Aberdeen Proving Ground

ATEC = Army Test and Evaluation Command

R&D&A = Research, Development and Acquisition

CE-LCMC = Communications-Electronics Life Cycle Management Command

CERDEC = Communications-Electronics Research Development and Engineering Center

ISDA = Information Systems Development and Acquisition

CSLA = Communications Electronics Command Communications Security Logistics Activity

1. Costs are based on a combination of new construction and renovation.

2. Costs are based on renovation.

According to COBRA reports, all military construction expenditures would occur by 2008 (DOD, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j). However if the Army prioritizes expenditures on construction to accommodate the movement of troop missions, construction expenditures for support missions may occur later.

Because APG is also losing the Ordnance Center and School and the Army Environmental Center, some of the infrastructure associated with these missions may be able to be rehabilitated and used for the missions APG is gaining, at a lower cost than new construction would entail. APG did not provide detailed information about whether the costs shown in Exhibit 10 reflect rehabilitation of space used by the missions it is losing.

3.0 ANDREWS AIR FORCE BASE

Andrews AFB, located in Prince George's County, MD, is the home of Air Force One and the 89th Airlift Wing as well as other missions. About 20,000 people currently live and work at Andrews (Comprint Military Publications, 2006).

As part of BRAC 2005, the DOD is transferring jobs and missions from installations in and near Arlington, VA, and other locations into Andrews AFB:

- the Aerial Port Squadron, moving from Martin State Air Guard Station (AGS), MD
- nine F-16s, moving from the 27th Fighter Wing, Cannon AFB, NM, to the 113th Wing
- numerous Air Force Headquarters functions and elements of the Air National Guard (ANG) Headquarters from leased installations in Arlington, VA
- relocating the installation management functions at Naval Air Facility Washington, MD, to Andrews, establishing Joint Base Andrews – Naval Air Facility Washington, MD (BRAC Commission, 2005).

In addition, the DOD is eliminating or transferring jobs currently at Andrews AFB by:

- relocating the Air Force Office of Special Investigation (AFOSI) to Marine Corps Base Quantico, VA
- relocating the Air Force Flight Standards Agency (AFFSA) and its two C-21 aircraft to Will Rogers World Airport AGS, OK
- disestablishing the inpatient mission at the 89th Medical Group and converting the hospital to a clinic with an ambulatory surgery center (BRAC Commission, 2005).

BRAC officials at Andrews AFB (Alexander, 2006) were prevented from providing current site-specific data other than what is available in the report of the BRAC Commission (BRAC Commission, 2005). However, the data from that report and DOD's COBRA reports do provide a preliminary indication of the potential impacts at Andrews AFB.

3.1 JOBS

Exhibit 11 provides a summary of moves affecting Andrews AFB by organization. As the exhibit shows, Andrews is estimated to gain 431 positions, not counting changes in base operations support personnel.

Exhibit 11. BRAC-Related Job Transfers Affecting Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Embedded Contractors	Total
Organizations Moving Into Andrews AFB					
Aerial Port Squadron (Martin State AGS, MD)	0	0	0	0	0
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	0	0	0	0	0
AF and ANG Headquarters (Arlington, VA)	429	178	441	271	1,319

Exhibit 11. BRAC-Related Job Transfers Affecting Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Embedded Contractors	Total
Installation Management Functions of Naval Air Facility Washington, MD	0	0	0	0	0
Total	429	178	441	271	1,319
Organizations Moving Out of Andrews AFB					
Air Force Office of Special Investigation	-83	-169	-159	-362	-773
Air Force Flight Standards Agency	-28	-57	-30	0	-115
Inpatient Mission at 89 th Medical Group	0	0	0	0	0
Total	-111	-226	-189	-362	-888
Net Changes at Andrews AFB					
Total	318	-48	252	-91	431

Source: DOD, 2005k, 2005l, 2005m, 2005n, 2005o, 2005p, 2005q (officers, enlisted, and civilians); BRAC Commission, 2005, Appendix K (contractors).

AFB = Air Force Base

AGS = Air Guard Station

AF = Air Force

ANG = Air National Guard

The transfer of positions into and out of Andrews will result in a change in base operations support personnel, such as maintenance, cleaning, and other support staff. COBRA reports indicate that the base will experience a net loss of 31 civilian and military positions related to base operations support (**Exhibit 12**).

Exhibit 12. Base Operations Support Position Changes Related to Job Transfers Affecting Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Total
Organizations Moving Into Andrews AFB				
Aerial Port Squadron (Martin State AGS, MD)	0	1	0	1
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	3	31	79	113
AF and ANG Headquarters (Arlington, VA)	34	-1	9	42
Installation Management Functions of Naval Air Facility Washington, MD	0	0	0	0
Total	37	31	88	156
Organizations Moving Out of Andrews AFB				
Air Force Office of Special Investigation	-7	-14	-6	-27
Air Force Flight Standards Agency	0	0	0	0
Inpatient Mission at 89 th Medical Group	-50	-76	-34	-160
Total	-57	-90	-40	-187
Net Changes at Andrews AFB				
Total	-20	-59	48	-31

Source: DOD, 2005k, 2005l, 2005m, 2005n, 2005o, 2005p, 2005q.

AFB = Air Force Base

AGS = Air Guard Station

Exhibit 12. Base Operations Support Position Changes Related to Job Transfers Affecting Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Total
AF = Air Force				
ANG = Air National Guard				

Exhibit 13 provides a summary of position changes affecting Andrews AFB related to both the movement of regular positions and changes in base operations support positions. Exhibit 13 also includes contractor positions moving.

Exhibit 13. Net Position Changes at Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Contractors	Total
Organizations Moving Into Andrews AFB					
Aerial Port Squadron (Martin State AGS, MD)	0	1	0	0	1
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	3	31	79	0	113
AF and ANG Headquarters (Arlington, VA)	463	177	450	271	1,361
Installation Management Functions of Naval Air Facility Washington, MD	0	0	0	0	0
Total	466	209	529	271	1,475
Organizations Moving Out of Andrews AFB					
Air Force Office of Special Investigation	-90	-183	-165	-362	-800
Air Force Flight Standards Agency	-28	-57	-30	0	-115
Inpatient Mission at 89 th Medical Group	-50	-76	-34	0	-160
Total	-168	-316	-229	-362	-1,075
Net Changes at Andrews AFB					
Total	298	-107	300	-91	400

Source: DOD, 2005k, 2005l, 2005m, 2005n, 2005o, 2005p, 2005q (officers, enlisted, and civilians); BRAC Commission, 2005, Appendix K (contractors).

AFB = Air Force Base

AGS = Air Guard Station

AF = Air Force

ANG = Air National Guard

3.1.1 Pay Grade and Income

Neither Andrews AFB nor the losing installations provided information on pay grade or average pay for the personnel whose functions are moving to Andrews AFB. However, the total pay can be estimated using the data in Exhibit 13 along with average salary information for military and civilian personnel. **Exhibit 14** provides a summary of information on estimated total pay for positions moving to Andrews AFB.

Exhibit 14. Estimated Pay Associated with Job Transfers Affecting Andrews AFB

Organization and Location	Officers	Enlisted	Civilians	Contractors	Total	Total Estimated Pay¹
Organizations Moving Into Andrews AFB						
Aerial Port Squadron (Martin State AGS, MD)	0	1	0	0	1	\$41,678
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	3	31	79	0	113	\$6,272,265
AF and ANG Headquarters (Arlington, VA)	463	177	450	271	1,361	\$88,185,451
Installation Management Functions of Naval Air Facility Washington, MD	0	0	0	0	0	\$0
Total Moves Into Andrews AFB	466	209	529	271	1,475	\$94,499,394
Organizations Moving Out of Andrews AFB						
Air Force Office of Special Investigation	-90	-183	-165	-362	-800	-\$46,530,047
Air Force Flight Standards Agency	-28	-57	-30	0	-115	-\$6,446,952
Inpatient Mission at 89 th Medical Group	-50	-76	-34	0	-160	-\$9,264,234
Total Moves Out of Andrews AFB	-168	-316	-229	-362	-1,075	-\$62,241,233
Net Movement Into Andrews AFB	298	-107	300	-91	400	\$32,258,161

Source: DOD, 2005k, 2005l, 2005m, 2005n, 2005o, 2005p, 2005q (number of officer, enlisted, and civilian positions, and average pay for civilians); BRAC Commission, 2005, Appendix K (number of contractors); DOD, 2006 (average pay for officers and enlisted personnel).

AFB = Air Force Base

AGS = Air Guard Station

AF = Air Force

ANG = Air National Guard

1. Pay is estimated based on average actual pay in 2006 for officers (\$81,162) and enlisted persons (\$41,678) (DOD, 2006), and on COBRA standard factors, which suggest an average cost of \$59,959 for civilian personnel (e.g., DOD, 2005k). The average cost for civilians from DOD (2005k) was also used to estimate pay from contractor positions.

3.1.2 Additional Demographic Information

Neither Andrews AFB nor the losing installations provided information on the age of the workforce, educational or security clearance requirements, or marital status or dependents for personnel whose functions are moving to Andrews AFB, or information on the likelihood that personnel whose functions are moving to Andrews AFB will move with the jobs. However, based on an average household size of 2.6 persons in Virginia (U.S. Census Bureau, 2005), the net 400 positions gained (Exhibit 13) implies an additional gain of 640 household members, for a

total inflow of 1,040 people. Estimates are not available on how many family members will move with the positions gained.

3.2 TIMELINE FOR THE MOVES

Neither Andrews AFB nor the losing installations provided information on the timeline for the movement of missions gained or lost. However, COBRA data suggest that the moves will happen between 2007 and 2010 (**Exhibit 15**).

Exhibit 15. Timeline for Position Movements Affecting Andrews AFB

Organization and Location	2007	2008	2009	2010	Total
Organizations Moving Into Andrews AFB					
Aerial Port Squadron (Martin State AGS, MD)	0	0	0	0	0
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	0	0	0	0	0
AF and ANG Headquarters (Arlington, VA) ¹	0	0	360	688	1,048
Installation Management Functions of Naval Air Facility Washington, MD	0	0	0	0	0
Total Moves Into Andrews AFB	0	0	360	688	1,048
Organizations Moving Out of Andrews AFB					
Air Force Office of Special Investigation ²	0	0	-411	0	-411
Air Force Flight Standards Agency	-115	0	0	0	-115
Inpatient Mission at 89 th Medical Group	0	0	0	0	0
Total Moves Out of Andrews AFB	-115	0	-411	0	-526
Net Movement Into Andrews AFB	-115	0	-51	688	522

Source: DOD, 2005k, 2005l, 2005m, 2005n, 2005o, 2005p, 2005q. Includes regular position assignments and base operations support positions.

AFB = Air Force Base

AGS = Air Guard Station

AF = Air Force

ANG = Air National Guard

1. Does not include movement of 271 contractors into Andrews AFB. No information is available on the timeline for this movement.

2. Does not include movement of 362 contractors out of Andrews AFB. No information is available on the timeline for this movement.

3.3 COSTS

Neither Andrews AFB nor the losing installations provided information on infrastructure costs related to the movement of organizations into Andrews. However, COBRA reports from the May 2005 DOD recommendations provide estimated costs (**Exhibit 16**).

Exhibit 16. Estimated BRAC Military Construction Expenditures at Andrews AFB (\$ thousands)

Organization and Location	2006	2007	2008	2009	Total
Aerial Port Squadron (Martin State AGS, MD)	\$168	\$1,869	\$0	\$0	\$2,037
Nine F-16s from 27th Fighter Wing (Cannon AFB, NM)	\$35	\$393	\$0	\$0	\$428
AF and ANG Headquarters (Arlington, VA)	\$4,166	\$0	\$15,430	\$30,860	\$50,456
Installation Management Functions of Naval Air Facility Washington, MD	\$0	\$0	\$0	\$0	\$0
Total	\$4,369	\$2,262	\$15,430	\$30,860	\$52,921

Source: DOD, 2005k, 2005l, 2005m, 2005n.

AFB = Air Force Base

AGS = Air Guard Station

AF = Air Force

ANG = Air National Guard

Note: There are no military construction expenditures at Andrews AFB for organizations leaving the installation.

Because Andrews is also losing some missions, some of the infrastructure associated with these missions may be able to be rehabilitated and used for the missions gained, at a lower cost than new construction would entail. Andrews AFB did not provide information about whether rehabilitation is possible or likely, or information on the estimated cost to rehabilitate existing infrastructure.

4.0 BETHESDA NATIONAL NAVAL MEDICAL CENTER

Bethesda National Naval Medical Center (NNMC Bethesda) in Bethesda, MD, is among the nation's largest hospitals, providing medical care, graduate medical and dental education, and other services, and performing medical research. The DOD is transferring positions from Walter Reed Army Medical Center (AMC) in Washington, DC, to NNMC Bethesda to establish the Walter Reed National Military Medical Center. Specifically, the missions moving to NNMC Bethesda include:

- all tertiary medical services (sub-specialty and complex care)
- Legal Medicine
- additional personnel sufficient to establish a Program Management Office that would coordinate pathology results, contract administration, and quality assurance and control of DOD second opinion consults worldwide (BRAC Commission, 2005).

Nontertiary patient care functions and other missions at Walter Reed AMC are relocating to Fort Belvoir, VA, and other installations (BRAC Commission, 2005).

It is important to note that the Walter Reed AMC is about six miles from the existing Bethesda NNMC campus. The "movement" of these positions will principally involve the construction of a new medical facility on the Bethesda campus and, when completed, the shift in traffic patterns away from the Walter Reed campus to the Bethesda campus. Many personnel may simply commute to NNMC Bethesda rather than changing jobs or moving residences.

In addition, the DOD may transfer jobs from leased space in northern Virginia to the new Walter Reed National Military Medical Center in order to collocate a Medical Command Headquarters at a single installation. However, the Medical Command Headquarters may instead be established in another location (BRAC Commission, 2005). This potential movement is the subject of ongoing discussion, and a decision about where to establish the Medical Command Headquarters is still pending (Olesen, 2006).

4.1 JOBS

Approximately 1,200 positions will relocate from Walter Reed AMC to NNMC Bethesda, and the total addition to the staff of NNMC Bethesda will include 3,467 positions (Olesen, 2006); the additional 2,267 likely represent an increase in base operations support positions. Trieber (2006) indicates that about 40% (i.e., about 480) of the 1,200 positions moving from Walter Reed AMC would be military and 60% (i.e., about 720) would be civilian. Neither NNMC Bethesda nor the losing installation provided a breakout of how many of the additional 2,267 positions would be officers, enlisted personnel, civilians, or embedded contractors. The BRAC Commission report (BRAC Commission, 2005) states that there are no embedded contractor positions expected to move to NNMC Bethesda as part of this recommendation.

4.1.1 Pay Grade and Income

Neither NNMC Bethesda nor Walter Reed AMC provided information on the pay grade or average pay for the workforce for personnel whose functions are moving to NNMC Bethesda. However, Trieber (2006) indicates that about 40% of the 1,200 positions moving from Walter Reed AMC would be military and 60% would be civilian. Assuming the base operations support position increases follow the same split, and using an average military salary of \$48,176 (DOD, 2006) and average civilian cost of \$59,959 (from COBRA standard factors) (DOD, 2005h), the 3,467 position increases (Olesen, 2006) would represent about \$192 million in total pay.

4.1.2 Additional Demographic Information

Neither NNMC Bethesda nor Walter Reed AMC provided information on the age of the workforce, educational or security clearance requirements, or marital status or dependents for personnel whose functions are moving to NNMC Bethesda. However, given the nature of the missions moving to NNMC Bethesda, medical training is likely necessary for these positions.

Neither installation provided information on how many of the personnel whose functions are moving to NNMC Bethesda would either stay in their current residence and commute to the new installation or move and keep the position. However, given the proximity of the two installations, many personnel may simply commute to NNMC Bethesda rather than changing jobs or moving residences. To the extent that personnel would relocate with their spouses and dependents, if the average household size of 2.1 persons for Washington, DC (U.S. Census Bureau, 2005) accurately represents family size for personnel moving, the 3,467 positions gained could imply a total gain of 3,814 household members, for a total inflow of 7,281 people.

4.2 PATIENT LOAD

Olesen (2006) predicts that the patient load at NNMC Bethesda will double as a result of the relocation of tertiary care and other functions from Walter Reed AMC. **Exhibit 17** provides a summary of the current patient load (Olesen, 2006). If the current load were to double, there would be an additional 560,000 outpatient visits per year, and an average of about 120 additional inpatients on an average day in the hospital.

Exhibit 17. Current Patient Load at NNMC Bethesda

Item	Number
Enrolled Population as of August 2005 ¹	33,376
Total Outpatient Visits for FY 2004 ¹	557,837
Inpatient Utilization for FY 2004	
Average Daily Census	119
Average Length of Stay	4.42
Average Deliveries per Month	160
Average Operating Room Cases per Month	755
Average Ambulatory Procedure Visits per Month ²	954

Source: Olesen, 2006.

NNMC = National Naval Medical Center

FY = Fiscal Year

Exhibit 17. Current Patient Load at NNMC Bethesda

Item	Number
------	--------

1. Does not include branch health clinics.
2. Represents same day surgery visits and other outpatient visits provided by designated special treatment units.

4.3 TIMELINE FOR THE MOVES

Neither of the affected installations provided information on the timeline for the movement of positions and missions to NNMC Bethesda. However, the COBRA report for this recommendation indicates that all position moves would happen in 2010 (DOD, 2005h).

4.4 COSTS

Neither of the affected installations provided information on the costs of military construction to accommodate the missions and positions moving to NNMC Bethesda, although Olesen (2006) states that new construction would entail an additional 744,000 square feet. However, the COBRA report for this recommendation provides estimated costs (**Exhibit 18**).

Exhibit 18. Estimated Military Construction Expenses at NNMC Bethesda (2005 \$ thousands)

Organization	2006	2007	2008	2009	Total
Establish Walter Reed National Military Medical Center	\$21,496	\$53,836	\$71,781	\$53,836	\$200,949

Source: DOD, 2005h.

NNMC = National Naval Medical Center

5.0 FORT MEADE

Fort George G. Meade, an Army base located in Anne Arundel County, MD, primarily supports intelligence, knowledge capital, and information management organizations. Fort Meade provides base operations support for facilities and infrastructure, quality of life, and protective services in support of DOD activities and Federal agencies, and is the home of the National Security Agency (NSA). Prior to BRAC 2005 actions, Fort Meade had an authorized population of 30,204 positions (DOD, 2005r).

As part of BRAC 2005, DOD is collocating adjudication activities, media activities, and the Defense Information Systems Agency (DISA) at Fort Meade. (Note that media activities include over 1,000 positions worldwide that will not move to Fort Meade as part of BRAC 2005.) Specific organizations involved in the moves are shown in Section 5.1 below. No activities are leaving Fort Meade as part of BRAC 2005 (BRAC Commission, 2005).

Related to the consolidation of DISA, the BRAC Commission found that the Joint Spectrum Center in Annapolis, MD, and the Defense Cyber Crime Center in Linthicum, MD, should also consolidate to Fort Meade. However, the Commission indicated that these moves should occur outside the BRAC process (BRAC Commission, 2005). There may be additional positions authorized at the NSA over the implementation period of the BRAC recommendations; however, the positions added are not BRAC related, and the number is not available for security reasons.

5.1 JOBS

Exhibit 19 provides a summary of position impacts on Fort Meade by organization. As the exhibit shows, Fort Meade will gain about 5,600 on-base positions due to the BRAC process. These numbers appear to include base operations support positions. Estimates of off-base contractors are available only for DISA: Hartman (2006) estimates there are 3,000 to 5,000 additional off-base contractor positions associated with DISA activities moving to Fort Meade.

Exhibit 19. BRAC-Related Position Increases and Potential Mission Contractor Moves Affecting Fort Meade

Activity	Military	Civilian	Embedded Contractors	Total
Adjudication Activities ¹	22	816	113	951
Media Activities	218	314	137	669
DISA Activities (including Joint Network Management System Program Office from Fort Monmouth, NJ) ²	478	2,209	1,410 ³	4,097
Total Increase at Fort Meade	718	3,339	1,660	5,717

Sources: Hartman, 2006 (adjudication), Hiner, 2006 (media), and Re, 2006 (DISA).

Note: No activities leave Fort Meade due to BRAC 2005.

DISA = Defense Information Systems Agency

1. Does not include personnel associated with the Army Central Clearance Facility (CCF) who are already at Fort Meade and just relocating within the base. Townes (2006) provided different totals for adjudication organizations (including the Army CCF) of 676 military and civilian and 162 contractors, for

**Exhibit 19. BRAC-Related Position Increases and Potential Mission Contractor Moves
Affecting Fort Meade**

Activity	Military	Civilian	Embedded Contractors	Total
----------	----------	----------	----------------------	-------

a total of 838 positions.

2. Hartman (2006) provided different totals for DISA activities: 487 military, 2,178 civilians, and 1,433 contractors, for a total of 4,098 positions.

3. Does not include 3,000 to 5,000 non-embedded contractors associated with DISA (Re, 2006; Hartman, 2006).

The following three exhibits present more detailed information on the organizations moving into Fort Meade. **Exhibit 20** provides a summary of adjudication activities, **Exhibit 21** covers media activities, and **Exhibit 22** provides information about DISA activities. These numbers appear to include base operations support positions. Due to different data sources, the total positions shown for DISA differ from totals shown in Exhibit 19; nonetheless, the exhibits that follow provide the best detailed information available about the nature and current location of missions moving to Fort Meade.

**Exhibit 20. BRAC-Related Position Increases Associated with Adjudication Activities
Collocating At Fort Meade**

Organization	Military	Civilian	Embedded Contractors	Total
DOHA <ul style="list-style-type: none"> • Western Hearing Office, Woodland Hills, CA • Personal Security Division, Columbus, OH • Headquarters, Arlington, VA • Arizona Office, Phoenix, AZ • Boston Hearing Office, Natick, MA 	2	192	46	240
Air Force CAF, Washington, DC	18	99	46	163
Navy CAF, Washington, DC	0	142	17	159
National Security Agency CAF, Linthicum, MD ¹	0	178	0	178
Washington Headquarters Service CAF, Arlington, VA	2	29	2	33
Defense Intelligence Agency CAF, Washington, DC	0	30	2	32
Defense Industrial Security Clearance Office, Columbus, OH	0	146	0	146
Joint Staff CAF, Washington, DC	0	0	0	0
Total Increase at Fort Meade	22	816	113	951

Source: Hartman (2006).

DOHA = Defense Office of Hearings and Appeals

CAF = Central Adjudication Facility

Note: The Army Central Clearance Facility, which is relocating within Fort Meade, is not included (Hartman, 2006); this activity represents 110 personnel according to Townes (2006).

1. Townes (2006) provides an alternate total for this mission of 59 personnel.

**Exhibit 21. BRAC-Related Position Increases Associated with Media Activities
Consolidating At Fort Meade**

Organization	Military	Civilian	Embedded Contractors	Total
Soldiers Media Center (Alexandria, Fort Belvoir, and Crystal City, VA)	14	77	11	102
Naval Media Center, Anacostia Annex, DC	66	70	11	147
Air Force News Service, Kelly AFB, San Antonio, TX (includes Army and Air Force Hometown News)	92	68	0	160
AFIS, Crystal City, VA	46	99	115	260
Total Increase at Fort Meade	218	314	137	669

Source: Hiner, 2006.

AFIS = American Forces Information Service

Note: DOD media activities also include over 1,000 positions worldwide that will not move to Fort Meade as part of BRAC 2005.

Exhibit 22. BRAC-Related Position Increases Associated with DISA Consolidating At Fort Meade

Organization	Military	Civilian	Embedded Contractors	Total
DISA (Arlington, Falls Church, and Springfield, VA)	446	2,086	1,332	3,864
JTRS Program Office, Arlington, VA	5	16	0	21
DJC2 Program Office, Panama City, FL	16	7	23	46
JSC, Annapolis, MD	20	41	78	139
JNMS Program Office, Fort Monmouth, NJ	0	2	0	2
DISA Activity at Fort Monmouth, NJ	0	25	0	25
Total Increase at Fort Meade	487	2,178	1,433	4,098

Source: Hartman, 2006; BRAC Commission, 2005.

DISA = Defense Information Systems Agency

JTRS = Joint Tactical Radio System

DJC2 = Deployable Joint Command and Control

JSC = Joint Spectrum Center

JNMS = Joint Network Management System

Note: Due to different data sources, the total positions shown differ from the more current estimates shown in Exhibit 19; nonetheless, the data shown here are the best information available about the nature and current location of DISA related missions moving to Fort Meade.

5.1.1 Pay Grade and Income

For the adjudication activities, Townes (2006) states that pay grade will range from GS-5 to GS-15/O-6, with approximately 20 people in the uppermost category, and that the bulk will be GS-

11 to GS-13 adjudicators. If the average salary for GS-11 to GS-13 personnel (\$74,298 for the Washington, DC metropolitan area; OPM, 2006) is representative of the average salary for all 838 military and civilian adjudication personnel whose functions are moving to Fort Meade (Hartman, 2006), their combined pay would be about \$62 million.

Information on pay grade for the positions associated with media activities moving to Fort Meade is summarized in **Exhibit 23** (Hiner, 2006). Total pay for military and DOD civilian positions related to media activities is about \$34 million, and the average pay for the 535 employees shown is about \$63,700.

Exhibit 23. Grade and Pay for DOD Media Position Increases at Fort Meade

Grade	Number ¹	Pay for Military Positions				Pay for Civilian Positions ³
		Basic Pay ²	BAH ²	BAS ²	Total Pay ²	
E1-E7 / GS 1-6	217	\$25,235	\$12,110	\$3,267	\$40,612	\$28,854
E8-E9 / O1-O2 / WO / GS 7-11	64	\$46,161	\$15,293	\$2,593	\$64,047	\$51,183
O3-O4 / GS 12-13	179	\$61,665	\$18,608	\$2,250	\$82,523	\$80,692
O5-O6 / GS 14-15	73	\$88,229	\$23,611	\$2,250	\$114,090	\$112,725
O7-O8 / GS 16-18 (SES)	2	\$126,909	\$28,796	\$2,250	\$157,954	\$151,856
Total⁴	535	\$10,721,456	\$3,570,868	\$592,186	\$14,884,510	\$19,190,656

BAH = Basic Allowance for Housing

BAS = Basic Allowance for Subsistence

E = Enlisted

O = Officer

WO = Warrant Officer

GS = General Schedule

SES = Senior Executive Service

1. Source: Hiner, 2006. Does not include 134 contractors. (Note that the total number of personnel (535) differs from that in Exhibit 19 and Exhibit 21 (532); the reason for the discrepancy is unclear since the data are from the same source.)

2. Average actual pay in 2006 for members currently serving (DOD, 2006). Total pay is sum of basic pay and allowances for subsistence and housing. All figures are annual.

3. GS 1-15 pay is from OPM (2006), for the Washington, DC metropolitan area, for Step 5, averaged over the grades in each category. SES pay is average for 2004 from OPM (2005a), adjusted to 2006 dollars using GS rate increases for the Washington, DC metropolitan area (OPM, 2005b, 2006).

4. Hiner (2006) does not provide numbers of military and civilian personnel by grade, but does indicate that 41% of DOD positions are military while 59% are civilian. Total earnings are calculated based on this allocation (e.g., earnings contributed by positions in E1-E7 or GS 1-6 is based on 41% military x 217 positions x \$40,612 average military pay for E1-E7, plus 59% civilian x 217 positions x \$28,854 average civilian pay for GS 1-6).

Re (2006) provided information on pay grade for civilian employees of DISA, which is summarized in **Exhibit 24**. As the exhibit indicates, estimated average pay for the DISA civilian employees is about \$91,600, and total pay for the 2,209 incoming positions (Re, 2006) is about \$202 million.

Exhibit 24. Grade and Pay for DISA Civilian Position Increases at Fort Meade

Grade	Percent of Civilians ¹	Estimated Number of Civilians	Estimated Average Annual Pay ²
GS 4-7	2%	44	\$35,625
GS 8-10	3%	66	\$50,949
GS 11	4%	88	\$61,510
GS 12	16%	353	\$73,720
GS 13	36%	795	\$87,664
GS 14	23%	508	\$103,594
GS 15	15%	331	\$121,856
SES	1%	22	\$151,856
Total	100%	2,209	\$91,607

DISA = Defense Information Systems Agency

GS = General Schedule

SES = Senior Executive Service

1. Source: Re, 2006 (along with total number of civilians).

2. Source: GS pay is from OPM (2006), for the Washington, DC metropolitan area, for Step 5, averaged over the grades in each category. SES pay is average for 2004 from OPM (2005a), adjusted to 2006 dollars using GS rate increases for the Washington, DC metropolitan area (OPM, 2005b, 2006).

Exhibit 25 summarizes available information and estimates of average and total pay for all position changes at Fort Meade. As the exhibit shows, estimated total pay for position changes, including embedded contractors, is \$489 million. The exhibit does not include pay for nonembedded contractor positions. Hartman (2006) indicates there are 3,000 to 5,000 additional nonembedded contractor positions associated with DISA. If the average annual pay for these positions is comparable to the \$91,600 shown in Exhibit 25, the total pay associated with these positions would be between \$275 and \$458 million, for a total of \$734 to \$917 million.

Exhibit 25. Estimated Average and Total Pay for All Position Increases at Fort Meade

Activity	Number of Positions	Estimated Average Pay per Position	Total Pay for All Positions (\$ millions)
Adjudication ¹	951	\$74,300	\$71
Media ²	669	\$63,700	\$43
DISA ³	4,097	\$91,600	\$375
Total	5,717	\$85,457	\$489

DISA = Defense Information Systems Agency

1. Number of positions is from Hartman, 2006, and includes 113 contractors. Estimated average pay per position (including contractor positions) is based on average salary for GS-11 to GS-13 from OPM (2006), as described in text.

2. Number of positions is from Hiner, 2006 and includes 134 contractors. Estimated average pay per position (including contractor positions) is based on the estimated average pay for military and DOD civilian media positions, as summarized in Exhibit 23.

3. Number of positions is from Re, 2006 and includes 1,410 embedded contractors. Estimated average pay per position (including military and contractor positions) is based on the estimated average pay for DOD DISA technical civilian positions, as summarized in Exhibit 24.

5.1.2 Age of Workforce

Re (2006) reports that the average age of DISA employees is 48, and Hartman (2006) notes that many of the DISA workers are about 7 years from retirement. No further information about the age of the workforce is available from Fort Meade, the losing installations, or other sources.

5.1.3 Educational Requirements

Re (2006) indicates that sample degree programs associated with positions relocating to Fort Meade as part of the consolidation of DISA include the following:

- Business Administration/Management
- Finance
- Computer Scientist
- Engineering
- Electronic Engineer
- Information Systems/Technology
- Human Resources Management/Development
- Human Resource Development
- Operations Research

No other information on educational requirements is available.

5.1.4 Security Clearance Requirements

Re (2006) indicates that all DISA employees have at least a Secret clearance, and 2,000 have a Top Secret clearance. Information are not available from Fort Meade, the losing installations, or other sources on security clearance requirements for jobs associated with the media or adjudication organizations moving into Fort Meade.

5.1.5 Marital Status and Dependents

Hartman (2006) states that the projected impact to Fort Meade and surrounding communities from family members is 4,000 to 5,000 persons in addition to the positions moving, and total impact of all persons would be 10,000 to 15,000 employees and family members moving (including the 3,000 to 5,000 nonembedded contractors and their spouses and dependents). This estimate may not reflect the impact of any current DISA employees who continue to keep their current residence and commute to the new location.

Since the direct position impacts and nonembedded contractor trail comprise 8,600 to 10,600 persons (i.e., 5,604 positions gained plus 3,000 to 5,000 nonembedded contractors), the figure of 10,000 to 15,000 total employees, nonembedded contractors, and family members moving suggests that relatively few spouses and dependents would move. The average household size in Fairfax County, VA, for example, is 2.7 persons (U.S. Census Bureau, 2005).

However, the estimate of 10,000 to 15,000 total persons moving in would be consistent with a substantial number of people commuting on a daily or weekly basis but not moving their families or primary place of residence. The idea that a number of current employees would be interested in commuting to Fort Meade but not moving their families is supported by a DISA survey conducted in late 2005. This survey showed that 67% of 1,500 DISA employees surveyed said they would not move, and that one third had school age children (Re, 2006). Additional information about interest in options for commuting is in the following section.

5.1.6 Vacancies

Hartman (2006) reports that the staff associated with the media and DISA activities are concerned about the loss of personnel unwilling to move to Fort Meade, and that DISA estimates that 50% of personnel will not relocate to Fort Meade. A DISA survey conducted in late 2005 showed that 67% of 1,500 DISA employees surveyed said they would not move, and that one third had school age children (Re, 2006).

Townes (2006) states that for adjudication activities, current estimates are that 35% to 50% of employees will move with the organization. The number is likely to be lower for the Defense Industrial Security Clearance Office (currently located in Columbus, OH) and higher (on the order of 40-50%) for offices located in the National Capital Region (Townes, 2006).

Note that many of the positions moving to Fort Meade are currently located at installations in Virginia or Washington, DC, that are relatively close to Fort Meade. For instance, the DOD COBRA reports indicate that 99% of the positions associated with DISA, 70% of the positions associated with adjudication activities, and 71% of the positions associated with media activities that are planned to move to Fort Meade are currently located within 30 miles of Fort Meade (DOD, 2005e, 2005s, 2005t, 2005u). This reinforces the idea that there will be some interest in commuting, especially among the employees who are relatively close to retirement, even if employees would not move their residence. For instance, Hartman (2006) reports that many DISA employees may keep their homes in northern Virginia due to the homes' market value, but may be interested in renting apartments near Fort Meade to support a weekly commute.

Hartman (2006) also indicates that 21% of the DISA workforce live in Maryland, 75% in Virginia, 2% in Washington, DC, and 1% each in Pennsylvania and West Virginia. Those employees who live closer to Fort Meade than the current location of DISA may also choose to maintain their current residence and simply commute to the new location.

5.2 TIMELINE FOR THE MOVES

Almost all activities and organizations are scheduled to move in 2010, although one media organization (Air Force News Service) is scheduled to move in 2008 (Hartman, 2006). **Exhibit 26** provides a summary of personnel movement over time. Note that the position totals in this exhibit differ from the more recent estimates shown in Exhibit 19; however, this is the best information available relating to the timeline for position movement.

Exhibit 26. Organization Moves Into Fort Meade Over Time

Organization	2006	2007	2008	2009	2010	Total
Adjudication Activities	0	0	0	0	951	351
Media Activities	0	0	160	0	509	669
DISA ¹	0	0	0	0	4,098	4,098
Total	0	0	160	0	5,558	5,718

Source: Hartman, 2006. Although position totals differ from the more recent estimates shown in Exhibit 19, this is the best information available relating to the timeline for position movement.

DISA = Defense Information Systems Agency

1. Does not include estimated nonembedded contractor trail of 3,000 to 5,000 personnel (Hartman, 2006).

5.3 COSTS

Hartman (2006) provides estimated costs and a schedule for planning, designing, and building new infrastructure as a result of BRAC (**Exhibit 27**).

Exhibit 27. Estimated Costs (\$ millions) and Schedule for Activities Relocating to Fort Meade

Item	Adjudication ¹	Media	DISA	Total
Construction – Planning Costs	\$2.8	\$2.4	\$13.7	\$18.9
Construction – Design and Build Costs	\$31.5	\$26.1	\$151.8	\$209.4
Environmental Costs ²	\$0.1	\$0.1	\$29.7	\$29.9
Information Technology Costs ³	\$3.9	\$3.0	\$16.6	\$23.5
One-Time Other Costs ⁴	\$6.2	\$5.0	\$0	\$11.2
Total Capital Costs	\$44.5	\$36.6	\$211.8	\$292.9
Scheduled Start of Planning	Jan. 2006	Jan. 2006	Jan. 2006	na
Scheduled Start of Design/Build	Oct. 2007	Jan. 2007	Apr. 2007	na
Scheduled Completion of Design/Build	Dec. 2009	Jun. 2008	Dec. 2009	na

Source: Hartman, 2006.

na = Not applicable.

DISA = Defense Information Systems Agency

1. Townes (2006) indicates an alternate total capital cost of \$67.1 million over FY06-FY09, with over 90% of costs incurred in FY08/09 (including construction and moving costs).

2. Represents environmental costs other than for infrastructure, such as federal environmental reviews (Hartman, 2006) or the purchase of additional sewage or solid waste disposal capacity (DOD, 2005v).

3. Represents costs for extending and modernizing information technology infrastructure (DOD, 2005v).

4. Hartman (2006) does not indicate the nature of these costs; DOD (2005v) indicates this category may include land purchase costs, lease termination costs, meeting force protection standards at leased facilities, restoration costs (cost to restore facility to its original condition) when leaving a leased facility, impacts on non-DOD activities (e.g., costs incurred to rent vacated leased facilities), transportation of special equipment or munitions, or calibration of laboratory equipment after it is moved.

6.0 SUMMARY AND DISCUSSION

Exhibit 28 provides a summary of available information on net position movement due to BRAC 2005 at the four installations covered in this report.

Exhibit 28. Summary of Net Position Changes Due to BRAC 2005

Installation	Military	Civilian	Embedded Contractors	Potential Nonembedded Contractors	Additional Positions (Incomplete Information) ¹	Total
APG	-545	7,037	2,662	nd ²	n/a	9,154
Andrews AFB	191	300	-91	nd	n/a	400
NNMC Bethesda	480	720	nd	nd	2,267	3,467
Fort Meade	718	3,339	1,660	3,000 to 5,000	n/a	8,717 to 10,717
Total	844	11,396	4,231	3,000 to 5,000	2,267	21,738 to 23,738

APG = Aberdeen Proving Ground

AFB = Air Force Base

NNMC = National Naval Medical Center

n/a = not applicable

nd = no or insufficient data

1. Includes 2,267 position increases at NNMC Bethesda that are either military, civilian, or embedded contractors.

2. Patriots Alliance (2005) states there are 4,000 contractors associated with activities currently at Fort Monmouth. However, some of these contractors may be counted in the gain of 2,662 embedded contractors at APG.

While all of the military personnel will move with their positions, the movement of positions will create some vacancies in civilian and contractor jobs. **Exhibit 29** shows available information on the likelihood that civilian personnel will move with their jobs.

Exhibit 29. Summary of Information on Movement of Civilian Personnel and Embedded Contractors

Installation	Net Gain of Civilian and Embedded Contractor Positions	Available Information on Likelihood of Moving
APG	9,669	Current estimates are that 30% of personnel whose positions are moving from Fort Monmouth (which represents at least 3,939 civilian positions and potentially up to 2,359 embedded contractors) will move to APG (Nappi, 2006).
Andrews AFB	209	No information.
NNMC Bethesda	720 to 2,987 ¹	No information; however, the proximity of NNMC Bethesda to Walter Reed AMC suggests that many employees may choose to keep their current jobs and not relocate their residence.

Exhibit 29. Summary of Information on Movement of Civilian Personnel and Embedded Contractors

Installation	Net Gain of Civilian and Embedded Contractor Positions	Available Information on Likelihood of Moving
Fort Meade	4,999	A recent survey suggests that 33% of DISA employees would move with the organization (DISA civilians and embedded contractors represent 3,619 of the 4,999 positions) (Re, 2006). Hartman (2006) suggests that some DISA employees may be interested in renting apartments near Fort Meade to support a weekly commute. Townes (2006) estimates 35% -50% of civilians and embedded contractors involved in adjudication will move; these missions include 929 civilians and embedded contractors.

APG = Aberdeen Proving Ground

AFB = Air Force Base

AMC = Army Medical Center

NNMC = National Naval Medical Center

DISA = Defense Information Systems Agency

1. The upper bound shown includes 2,267 position increases at NNMC Bethesda that are either military, civilian, or embedded contractors.

The influx of jobs at the affected installations, whether they are filled by personnel moving with their jobs, new residents drawn to the area, or current residents who then vacate jobs they currently hold, would have additional impacts because of the movement of spouses and dependents. **Exhibit 30** provides a summary of available information on the potential total impacts from personnel, spouses, and dependents. Note that there are significant uncertainties associated with the estimates in the exhibit: they do not incorporate the potential nonembedded contractor trail, except for DISA at Fort Meade; they are generally based on Census average household sizes; and there is limited information on the likelihood that spouses and dependents will accompany personnel who move along with their positions.

Exhibit 30. Summary of Information on Personnel, Spouses, and Dependents

Installation	Net Gain of Positions¹	Total Potential Gain²
APG	9,154	Net gain implies about 15,562 additional household members, for a total inflow of 24,716 people
Andrews AFB	400	Net gain implies about 640 additional household members, for a total inflow of 1,040 people
NNMC Bethesda	3,467	Net gain implies about 3,814 additional household members, for a total inflow of 7,281 people
Fort Meade	8,717 to 10,717	A recent survey showed 33% of DISA civilian employees have school age children (Re, 2006). The total impact of all persons would be 10,000 to 15,000 employees and family members moving according to Hartman (2006), though this estimate may not reflect the impact of any current DISA employees who continue to keep their current residence and commute to the new location

Exhibit 30. Summary of Information on Personnel, Spouses, and Dependents

Installation	Net Gain of Positions ¹	Total Potential Gain ²
Total	21,738 to 23,738	Total inflow could be up to 48,000 people

APG = Aberdeen Proving Ground

AFB = Air Force Base

NNMC = National Naval Medical Center

1. Does not include non-embedded contractors, except for DISA at Fort Meade.

2. For APG, Andrews AFB, and NNMC Bethesda, estimated spouses and dependents are based on average household sizes for the region that corresponds to the largest position gain: 2.7 persons for Monmouth County, NJ, 2.6 persons for Virginia, and 2.1 persons for Washington, DC (U.S. Census Bureau, 2005).

Exhibit 31 provides summary information on estimated potential payroll associated with the net changes in positions at the four installations. Note that pay grade information was only available for a subset of the positions gained or lost; the estimate of total payroll is based on available information on average pay.

Exhibit 31. Summary of Information on Potential Payroll

Installation	Net Change in Positions	Potential Associated Payroll (\$ millions)
APG	9,154	\$824
Andrews AFB	400	\$32
NNMC Bethesda	3,467	\$192
Fort Meade	8,717 to 10,717	\$734 to \$917
Total	21,738 to 23,738	\$1,782 to \$1,965

APG = Aberdeen Proving Ground

AFB = Air Force Base

NNMC = National Naval Medical Center

Information on the timeline for movement of positions into the affected installations generally indicates that movement will be concentrated in 2009-2010. COBRA reports indicate that APG will gain positions starting in 2006, but the majority of gains will not occur until 2009, with all changes complete by 2009. COBRA reports for Andrews AFB and NNMC Bethesda suggest that the majority of position movement will occur in 2009 and 2010, with all changes complete by 2010. Hartman (2006) states that nearly all the position gains at Fort Meade are scheduled to occur in 2010. This is consistent with information from Whitaker (2006) that in its allocation of military construction funds, the Army intends to prioritize expenditures that would support the movement of troop organizations before expenditures that would support movement of nontroop organizations and, therefore, movements of support missions will generally occur toward the end of the timeline allowed for the BRAC process (all moves must be complete by the end of 2011).

We found that some personnel may be interested in commuting, perhaps on a weekly basis, including personnel whose functions are moving within the National Capital Region (e.g., DISA) or within the Northeastern Metro region (e.g., Fort Monmouth). State or local planning organizations could support that interest through ensuring that there are transportation and housing options for these personnel. We also identified interest in opportunities for on-base continuing education programs at both the graduate and undergraduate level, based on current programs at Fort Monmouth (Nappi, 2006; Fuhring, 2006). Fort Monmouth employees are also interested in preference incentives for spouses to move; this issue may involve the potential for

jobs for spouses at APG or the need for local schoolteachers (Nappi, 2006; Fuhring, 2006). Finally, we identified some interest among the Fort Monmouth employees and their dependents in quality of life issues such as the availability of night life near APG (Nappi, 2006; Fuhring, 2006). This information may be useful for targeted marketing efforts. Potential also exists in Fort Monmouth's program to "overhire" employees from Maryland to take on the positions that are moving to APG.

Exhibit 32 provides a summary of available information on military construction expenses and the timeline for the expenditures.

Exhibit 32. Summary of Information on Military Construction Expenditures

Installation	Estimated Military Construction Expenditures (\$ millions)	Available Information on Timeline
APG ¹	\$1,189	All expenditures are scheduled to occur by 2008
Andrews AFB ²	\$53	Expenditures are scheduled to occur between 2006 and 2009, mainly in 2008-2009
NNMC Bethesda ²	\$201	Expenditures are scheduled to occur between 2006 and 2009, mainly in 2007-2009
Fort Meade ³	\$315	Expenditures are scheduled to occur between 2006 and 2009, mainly in 2007-2009
Total	\$1,758	Scheduled between 2006-2009

APG = Aberdeen Proving Ground

AFB = Air Force Base

NNMC = National Naval Medical Center

1. Expenditures from Wright (2006); timeline from COBRA reports (DOD, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j).

2. Expenditures and timeline from COBRA reports (DOD, 2005k, 2005l, 2005m, 2005n).

3. Expenditures from Hartman (2006) and Townes (2006); timeline from Hartman (2006).

We obtained data on the age of current personnel whose positions are relocating for two organizations, Fort Monmouth and DISA. For both organizations, the average age of civilians in the current workforce is in the mid to late 40s (Nappi, 2006; Re, 2006). For instance, among the employees whose positions are moving from Fort Monmouth, Nappi (2006) indicates that 78% are over 40, 45% are over 50, and 11% are over 60. The relative seniority of the workforces at DISA and the Fort Monmouth missions, along with the indication from Whitaker (2006) that the Army plans to concentrate the BRAC-related movement of nonuniformed organizations toward the latter part of the BRAC movement period (2010 to 2011), suggests that many employees of these organizations may be close to retirement by the time the positions move. This underscores the opportunity that exists in Fort Monmouth's program of "overhiring" Maryland workers so that local residents are ready to take the positions that will move to APG.

Fort Monmouth and DISA also provided information on sample degree programs and job titles. This information suggests that useful backgrounds for the positions at these agencies are likely to include engineering, especially electronic and computer engineering; computer science; information systems and technology; logistics; business administration and management; contracting; human resources; operations research; and finance (Nappi, 2006; Craten, 2006; Re,

2006). The information for the current workforce at Fort Monmouth provided by Nappi (2006) suggests that advanced degrees are not necessarily required for most positions, although a majority of the current civilian workforce at Fort Monmouth do hold at least an undergraduate college degree.

Finally, based on information from Re (2006), Nappi (2006), and Fuhring (2006), the majority of positions moving from Fort Monmouth and all DISA positions would require at least a Secret clearance. In addition, about half of the DISA positions would require a Top Secret clearance. It is likely that both embedded and nonembedded contractor employees would generally need similar security clearances.

7.0 REFERENCES

- Alexander, Bruce, Lieutenant Colonel. 2006. BRAC Contact, Andrews AFB. Personal communication. March.
- Comprint Military Publications. 2006. Base Guides: Andrews AFB. Online at <http://www.dcmilitary.com/baseguides/airforce/andrews/index.html>, accessed March 25, 2006.
- Craten, Joe. 2006. BRAC Contact, Aberdeen Proving Ground. Personal communication. February.
- Defense Base Closure And Realignment Commission (BRAC Commission). 2005. Defense Base Closure and Realignment Commission Report. September 8. Online at <http://www.brac.gov/finalreport.asp>, accessed January 6, 2006.
- Fuhring, Mark. 2006. Assistant Deputy Chief of Staff, Personnel. Fort Monmouth, NJ. Personal communication. March.
- Hall, Katie. 2006. BRAC Contact, U.S. Army Garrison, Aberdeen Proving Ground. Personal communication. January.
- Hartmann, Ted. 2006. BRAC Transition Officer, Fort Meade. Personal communication. January-February.
- Hiner, Dick. 2006. Media Function BRAC Contact, Fort Meade. Personal communication. January.
- Nappi, Susan. 2006. Assistant Deputy Chief of Staff, Operations. Fort Monmouth, NJ. Personal communication. February-March.
- Olesen, Mark, Captain. BRAC Transition Officer, NNMC Bethesda, MD. Personal communication. March.
- Patriots Alliance. 2005. Community Rebuttal to the 2005 BRAC Recommendation to Close Fort Monmouth and its Fort Belvoir Elements and Re-create a Land C4ISR Center. Revision 1, July 14.
- Re, Joe. 2006. Defense Information Systems Agency BRAC contact, Fort Meade. Personal communication. February.
- Townes, Michael. 2006. Adjudication BRAC Contact, Fort Meade. Personal communication. February.
- Trieber, Randy. BRAC contact, Walter Reed Army Medical Center. Personal communication. March.

- U.S. Census Bureau. 2005. 2003 American Community Survey, General Demographic Characteristics. Online at <http://factfinder.census.gov>, accessed March, 2006.
- U.S. Department of Defense (DOD). 2006. Selected Military Compensation Tables, FY 2006. Online at http://www.defenselink.mil/prhome/docs/greenbook2_fy06.pdf, accessed February 10, 2006.
- U.S. Department of Defense (DOD). 2005a. Aberdeen Proving Ground Facts and Figures. Online at <http://www.apg.army.mil/apghome/sites/about/facts.asp>, accessed March 25, 2006.
- U.S. Department of Defense (DOD). 2005b. DOD Justification Data, 0064, Combat Support Service Center (Lee): COBRA Report File. May 23. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 06 - Education and Training/Combat Service Support Center/TAB 3/&Doc_st=0064 TAB 3.pdf, accessed January, 2006.
- U.S. Department of Defense (DOD). 2005c. DOD Justification Data, HSA-0092Rv2: Relocate Army Headquarters and Field Operating Agencies; COBRA Report Files. May 3. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 07 - Headquarters and Support Activities/&Doc_st=Relocate Army Headquarters and Field Operating Agencies.zip, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005d. DOD Justification Data, HSA-0065V2, Consolidate Army Test and Evaluation Command (ATEC) Headquarters: COBRA Report Files. April 21. Online at [http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 07 - Headquarters and Support Activities/&Doc_st=Consolidate Army Test and Evaluation Command \(ATEC\) Headquarters.zip](http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 07 - Headquarters and Support Activities/&Doc_st=Consolidate Army Test and Evaluation Command (ATEC) Headquarters.zip), accessed January, 2006. Tab 3. Also available at BRAC Commission E-Library (<http://www.brac.gov/DocSearch2005.aspx>) as Document Number 1533.
- U.S. Department of Defense (DOD). 2005e. DOD Justification Data, USA-0223v3, Fort Monmouth, NJ: COBRA Report Files. May 10. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 03 - ARMY/&Doc_st=Fort Monmouth, NJ.zip, accessed January, 2006.
- U.S. Department of Defense (DOD). 2005f. DOD Justification Data, MEDCR-0057R: COBRA Report Files. May 5. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 10 - Medical/Brooks City Base, TX/Tab 3/&Doc_st=MEDCR-0057R COBRA.pdf, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005g. DOD Justification Data, MEDCR-0028R, Joint Centers of Excellence for Chemical, Biological, and Medical Research and Development and Acquisition: COBRA Report Files. May 5. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 10 - Medical/Joint Centers of Excellence For Chemical, Biological, and Medical/Tab 3/&Doc_st=MEDCR-0028R COBRA.pdf, accessed January, 2006. Tab 3.

- U.S. Department of Defense (DOD). 2005h. DOD Justification Data, MEDCR-0002R, Walter Reed National Military Medical Center: COBRA Report Files. May 6. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 10 - Medical/Walter Reed National Military Medical Center, Bethesda, MD/Tab 3/&Doc_st=MEDCR-0002R COBRA.pdf, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005i. DOD Justification Data, Depot-Level Repairable Procurement Management Consolidation, CR403: COBRA Report Files. May 5. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 11 - Supply and Storage/Depot Level Repairable Procurement Management Consolidation/Tab 3/&Doc_st=COBRA Output CR403.pdf, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005j. DOD Justification Data, Defense Research Service Led Laboratories: COBRA Report File F2-TECH-009B. April 20. Online at http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 12 - Technical/Defense Research Service Led Laboratories/Tab 3/&Doc_st=F2 - TECH-0009B COBRA Realignment Report Final _6.pdf, accessed January, 2006.
- U.S. Department of Defense (DOD). 2005k. DOD Justification Data, Martin State Airport Air Guard Station, MD; COBRA Report Files. Online from 2005 BRAC Commission Library at <http://www.brac.gov/LibraryComm.aspx>, Document Number 1503; accessed March 2006.
- U.S. Department of Defense (DOD). 2005l. DOD Justification Data, Cannon Air Force Base, NM; COBRA Report Files. Online from 2005 BRAC Commission Library at <http://www.brac.gov/LibraryComm.aspx>, Document Number 1483; accessed March 2006.
- U.S. Department of Defense (DOD). 2005m. DOD Justification Data, HSA-0132RV3, Collocate AF and NG HQ Leased Locations. COBRA Report Files. May 4. Online at <http://www.brac.gov/>, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005n. DOD Justification Data, HSA-0010R, Joint Basing; COBRA Report Files. Online from 2005 BRAC Commission Library at <http://www.brac.gov/LibraryComm.aspx>, Document Number 1525, accessed March, 2006.
- U.S. Department of Defense (DOD). 2005o. DOD Justification Data, HSA-0108Rv2, Collocate MilDep Investigative Agencies at Quantico. COBRA Report Files. May 4. Online at <http://www.brac.gov/>, accessed January, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005p. DOD Justification Data, Realign Andrews AFB. COBRA Report Files. Online from 2005 BRAC Commission Library at <http://www.brac.gov/LibraryComm.aspx>, Document Number 52, accessed March, 2006.
- U.S. Department of Defense (DOD). 2005q. DOD Justification Data, MED-054R, Disestablish Inpatient Facilities. COBRA Report Files. April 29. Online at <http://www.brac.gov/>, accessed January, 2006. Tab 3.

- U.S. Department of Defense (DOD). 2005r. Installation Summary: Fort George G. Meade. Document Number 9227 in BRAC Commission E-Library (<http://www.brac.gov/DocSearch2005.aspx>), accessed March 25, 2006.
- U.S. Department of Defense (DOD). 2005s. DoD Justification Data, Consolidate Media Organizations into a New Agency for Media and Publications, HSA0071. COBRA Report Files. May 5. Online at [http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 07 - Headquarters and Support Activities/&Doc_st=Consolidate Media Organizations into a New Agency for Media.zip](http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume%2007-Headquarters%20and%20Support%20Activities/&Doc_st=Consolidate%20Media%20Organizations%20into%20a%20New%20Agency%20for%20Media.zip), accessed January 9, 2006. Tab 3. Also available in BRAC Commission E-Library (<http://www.brac.gov/DocSearch2005.aspx>) as Document Number 1537.
- U.S. Department of Defense (DOD). 2005t. DOD Justification Data, Collocate Defense-MILDEP Adjudication Activities at Ft Meade, MD. COBRA Report Files. April 23. Online at [http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume 07 - Headquarters and Support Activities/&Doc_st=Co-locate Defense, Military Department Adjudication Activities.zip](http://www.brac.gov/ShowDoc2.aspx?Path_st=docs/reports/supplemental/Volume%2007-Headquarters%20and%20Support%20Activities/&Doc_st=Co-locate%20Defense,%20Military%20Department%20Adjudication%20Activities.zip), accessed January 9, 2006. Tab 3.
- U.S. Department of Defense (DOD). 2005u. DOD Justification Book, Consolidate Defense Information Systems Agency and Establish Joint C4ISR D&A Capability; COBRA Report Files. Document Number 1535 in BRAC Commission E-Library (<http://www.brac.gov/DocSearch2005.aspx>), accessed March, 2006.
- U.S. Department of Defense (DOD). 2005v. COBRA Users Manual. Online at <http://www.defenselink.mil/brac/minutes/cobra/COBRAUsersManual.pdf>, accessed January 9, 2006.
- U.S. Office of Personnel Management (OPM). 2006. Salary Table 2006-DCB, Incorporating the 2.10% General Schedule Increase and a Locality Payment of 17.50% for the Locality Pay Area of Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV, effective January 2006. Online at <http://www.opm.gov/oca/06tables/pdf/DCB.pdf>, accessed March 29, 2006.
- U.S. Office of Personnel Management (OPM). 2005a. Pay Structure of the Federal Civil Service as of March 31, 2004. Online at <http://www.opm.gov/feddata/html/paystructure/2004/2004paystru.pdf>, accessed March 29, 2006.
- U.S. Office of Personnel Management (OPM). 2005b. Salary Table 2005-DCB, Incorporating the 2.50% General Schedule Increase and a Locality Payment of 15.98% for the Locality Pay Area of Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV, effective January 2005. Online at <http://www.opm.gov/oca/05tables/pdf/DCB.pdf>, accessed March 29, 2006.
- U.S. Office of Personnel Management (OPM). 1999. Civilian Acquisition Workforce Personnel Demonstration Project; Department of Defense (DoD); Notice. Federal Register, Vol. 64, No. 5 (January 8), pages 1426-1492.

U.S. Office of Personnel Management (OPM). 1997. Proposed Laboratory Personnel Management Demonstration Project; Department of the Army, U.S. Army Research Laboratory, Adelphi Maryland; Notice. Federal Register, Vol. 62, No.48 (March 12), pages 11646-11673.

Whitaker, Joseph. 2006. Deputy Assistant Secretary, Army. Personal communication. March.

Wright, John T., Col. 2006. U.S. Army Garrison, Aberdeen Proving Ground. Personal communication. March.

APPENDIX. OFFICIALS CONTACTED

Following is a list of the offices and officials that we contacted and that contributed information and comments to this task.

Fort Meade:

- Col. Kenneth McCreedy, commanding
- Ted Hartman, BRAC Transition Officer
- Dick Hiner, Media Function BRAC contact
- Joe Re, Defense Information Systems Agency BRAC contact
- Michael Townes, Adjudication BRAC contact

Aberdeen Proving Ground:

- Col. John Wright, commanding
- Joe Craten, BRAC contact
- Katie Hall, BRAC contact

Fort Monmouth:

- Sue Nappi, Assistant Deputy Chief of Staff, Operations
- Mark Fuhring, Assistant Deputy Chief of Staff, Personnel
- Lieutenant Colonel Charles Hayes, Staff Judge Advocate
- Kathy Fisher, Human Resources

Bethesda Naval Medical Center:

- Capt. Mark Olesen, BRAC Transition Officer

Walter Reed Army Medical Center:

- Randy Trieber, BRAC contact

Andrews AFB:

- Lieutenant Colonel Bruce Alexander, BRAC contact

Military Service Representatives:

- Serena Eitler, Office of Economic Adjustment
- Col. James P. Holland, Deputy Assistant Secretary, Air Force
- Gerald Johnson, Chief Operating Officer, Air Force
- Joseph Whitaker, Deputy Assistant Secretary, Army
- William Birney, Office of Deputy Assistant Secretary, Army
- Col. Robert Derrick, Assistant Chief of Staff, Installation Management, Army

Department of Labor:

- Gay Gilbert, Employment and Training Administration

Local Officials:

- Bruce England, Susquehanna Workforce Network
- Aaron Tomarchio, Harford County

- Denise Caraggio, Harford County, Army Alliance
- Andy Moser, Anne Arundel Workforce Development Corporation
- Christina Wiegand, Anne Arundel County, Economic Development Corporation
- Rob Klein, Economic Development Corporation of Montgomery County
- Kristina Ellis, Montgomery County
- Eric Seleznow, Montgomery County Workforce
- Tom Sadowski, Economic Alliance